

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 2, line 30, to read as follows:

--On substrate 14 there is a sensitive layer 22 which reversibly changes color when the minimum concentration of the gas to be determined is exceeded. Sensitive layer 22 includes particles 16 which are optically transparent to a radiation 13 emitted from radiation source 12 and can be made, for example, as little glass spheres or as particles of glass, quartz, sapphire, a ceramic such as zirconium dioxide or a polymer such as PMMA, PA, PP or PS. These lead to refraction or scattering of incident radiation 13, as the case may be, particularly when particles 16 are designed as hollow spheres. Particles 16 have a diameter of 3 to 20 μm , and on their surface they have material 18, which is sensitive to the gas to be determined. This material 18 contains a polymer matrix in which the compounds responsible for the sensitivity of the sensor are located, as, for instance, a pH indicator and a base. An example of such a compound is tetraoctylammonium hydroxide. In a preferred execution of the sensitive layer 22, this matrix is made of polydimethylsiloxane; but other silicones or polymers such as PVC or ethylcellulose are suitable as well.--.